

P a t e n t   c l a i m s

1. A switch and/or a Metro access node within an asynchronous communication network, where the switch includes one or more outputs and a buffer unit, said buffer unit is either an integral part of the switch or an external part of the switch adapted to communicate with the switch, c h a r a c t e r i z e d i n that the buffer unit is adapted to buffer the data and/or packets until a predefined number of wavelengths leading to a buffered packets destination is/are vacant.

2. A switch and/or a Metro access node according to claim 1,  
c h a r a c t e r i z e d i n that the switch and/or the Metro access node is adapted to monitor vacant wavelengths or frequencies at the switch' and/or Metro access node outputs.

3. A switch and/or a Metro access node according to claim 1 or 2,  
c h a r a c t e r i z e d i n that the data and/or buffered packets are classified according to packet length and/or the length of the data in other formats such as databursts or data streams.

4. A switch and/or a Metro access node according to claim 2 or 3,  
c h a r a c t e r i z e d i n that packets of data and/or data in other formats such as databursts or data streams with a length within a first range is associated with a first queue,

packets of data and/or data in other formats such as databursts or data streams with a length within a second range is associated with a second queue, and/or

packets of data and/or data in other formats such as databursts or data streams with a length within a third range is associated with a third queue, further packets of data and/or data in other formats such as databursts or data streams of other lengths may be associated with an arbitrary number of ranges and each range can be associated with a specific queue as indicated for the first, second and third queue.

5. A switch and/or a Metro access node according to any of the previous claims,

characterized in that the data, databurst or data streams at the buffer unit inputs originates from lines external to the switch.

6. A switch and/or a Metro access node according to any of the previous claims,

characterized in that external lines are low bit rate lines such as aggregation inputs such as metro access rings.

7. A switch and/or a Metro access node according to any of the claims 1-4,

characterized in that the data, databurst or data streams at the buffer unit input is routed from a one or more switch' inputs.

8. A switch and/or a Metro access node according to one of the previous claims,

characterized in that the switch and/or a Metro access node is adapted to operate within one of the following nets:

- a optical packet switched network,
- a optical bursts switched network,
- a electronic packet switched network,
- a WDM network,
- a electronic bursts switched network.

9. A switch and/or a Metro access node according to claim 5,  
c h a r a c t e r i z e d i n that the switch and/or Metro access node can be either an optical switching unit or an electronic switching unit.

10. A switch and/or a Metro access node according to claim 7,  
c h a r a c t e r i z e d i n that the outputs and/or inputs of the switch and/or Metro access node are WDM signals.

11. A switch and/or a Metro access node according to claim 9,  
c h a r a c t e r i z e d i n that the buffer is an electronic type of buffer.

12. A method for organizing dataflows in an asynchronous communication network including at least one switch and/or Metro access node where said switch and/or Metro access node is associated with at least one buffer and at least a dataflow that can be divided into data packets said dataflow is communicating with the switch and/or Metro access node and the data packets are buffered in the buffer and the method is further  
c h a r a c t e r i z e d i n that the buffer unit are buffering the data and/or packets until a predefined number of wavelengths leading to a buffered packets destination is/are vacant.

13. A method according to claim 12,  
c h a r a c t e r i z e d i n that the switch and/or the Metro access node is monitoring vacant wavelengths or frequencies at the switch' and/or Metro access node outputs.

14. A method according to claim 12 or 13,  
c h a r a c t e r i z e d i n that the buffered data

packets are divided into a number of queues according to certain parameters of the data packets such as the length of the data packets.

15. A method according to claim 14,  
c h a r a c t e r i z e d i n that data packets with a length within a first range is associated with a first queue,

data packets with a length within a second range is associated with a second queue, and/or

data packets with a length within a third range is associated with a third queue, further data packets of other lengths may be associated with an arbitrary number of ranges and each range can be associated with a specific queue.